

2005 Annual Report

Door County
Public Health
Department

PUBLIC HEALTH DEPARTMENT STAFF

Full-time Personnel

Rhonda Kolberg, R.N., M.S., Director /Health Officer
Mary Ellen Smith, R.N., B.S.N., Public Health Nurse II
Myria Normann, R.N., B.S.N., Public Health Nurse I
Andrea Patza, R.N., B.S.N., Public Health Nurse I
Teresa Mertens, WIC Nutritionist/Coordinator & PH Nutritionist
Diane Christenson, Administrative Assistant/Account Clerk
Marsha Kurth, Medical Assistant/Public Health Aide

Part-time Personnel

John J. Beck, M.D., Door County Medical Advisor
Nancy Stults, R.N., B.S.N., Public Health Nurse II
Karen Sautebin, R.N., B.S.N., Public Health Nurse II
Tim Montee, Registered Nurse
Valerie Mosgaller, Medical Assistant/Clerk
Barbara Duquaine, Clerk-Typist I
Tammy Wagner, Community Health Aide
Delores Nelson, Community Health Aide

Program Consultant

Beth Ann Krohn, R.N., B.S.N., Women's Cancer Control Program, MCH Grant, Prevention Grant, Bioterrorism Grant, & Tobacco Grant

Official Board of Health

Susan Hilsabeck, (Chair) (until April) 1158 Bonnie View Drive, Sturgeon Bay
Marc Savard, (Chair) (May through December) 1693 Wildwood Rd, Sister Bay
Charles Brann, 207 N. Fulton Ave., Sturgeon Bay
Jaime Forest, 5880 Cedar Creek Place, Sturgeon Bay
Charles Gulley, 371 S. Forestville Ave, Forestville
Dale Wiegand, 5340 Townline Rd, Sturgeon Bay
Dr. Fred Krumenacher, 11101 Cty Rd ZZ, Sister Bay
Lawrence Leporte, P.E., 6287 Ledge Road, Sturgeon Bay
Marcia Osborne, R.N., 1157 Bonnie View Drive, Sturgeon Bay

Advisory Personnel

Dennis Hibray, Regional Director, Division of Health, Green Bay
Diane Moreau-Stodola, M.S., R.D., District Public Health Nutritionist Consultant,
Division of Health, Green Bay
Cathy Sendelbach, MS, Public Health Educator, Division of Health, Green Bay
Rebecca Hovarter, District Public Health Nurse, Division of Health, Green Bay
Jean Zastrow, Public Health Educator and Immunization Program Representative,
Division of Health, Green Bay

AGENCY VOLUNTEER WORKERS

SCHOOL SCREENING PROGRAMS

Bea Bircher
Sherry Hanson
Helen Krueger
Lori Nebel
Wendy Rivkin
Jennifer Scanlon
Marlene Swain
Penny Wautier
Kim Welch

Tammy Danz
Ann Jenkins
Lori Kruswick
Allyson Nesbitt
Pat Spielman
DeeDee Storlic
Carol Wagner
John Welch
Mary Welch

BLOOD PRESSURE CLINICS

June Peterson

PROGRAM TOTALS FOR 2004 and 2005

	<u>2004</u>	<u>2005</u>
R.N. Visits		
General Visits:	556	713
Postpartum:	108	120
Prenatal visits:	60	77
Jail Visits:	1224	Program Discontinued
<i>DNA Tests</i>	23	Program Discontinued
<i>Inmate Drug Tests</i>	119	Program Discontinued
Health Check		
Children screened:	8	3
Referrals made:	5	3
Interperiodic Visits	137	117
WIC Program		
Monthly average active participants:	443	443
Certifications	278	275
Recertifications :	559	534
Communicable Disease Reports	118	124
Prenatal Care Coordination		
Number of participants:	30	29
Childhood Lead		
Children screened:	296	292
Children referred:	2	2
Cholesterol Testing	55	44

**TOTAL NUMBER OF PERSONS PROTECTED
AGAINST EACH DISEASE BY VACCINATION**

	<u>2004</u>	<u>2005</u>
Measles-Mumps-Rubella (MMR)	496	489
Inactive Polio Vaccine	279	263
Diphth-Tetanus-Acellular Pertussis (DTaP)	503	436
DTaP/HepB/Polio (Pediarix)	621	610
Hib/HepB Combined	110	8
Tetanus-diphtheria (Td)	452	431
Tetanus-diphtheria-pertussis (Tdap)		9
Hib	553	634
Meningococcal		6
Influenza	528	1400
Hepatitis B	191	40
Varicella	297	368
Pneumococcal	761	869
Hepatitis A	70	86
T.B. Skin Test	328	427
Total:	5189	6076

VISION SCREENING PROGRAM

Persons screened	863	1984
Persons referred for diagnosis	32	81
Treatment recommended by doctor	30	62

HEARING SCREENING PROGRAM

Persons screened	1743	1789
Persons referred for diagnosis	21	42
Treatment recommended by doctor	13	23

IFSP (INDIVIDUALIZED FAMILY SERVICE PLAN - Age 0 - 3)

Number of students	9	3
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IEP (INDIVIDUALIZED EDUCATION PLAN) MEETINGS

Number of students	8	13
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ISP (INTEGRATED SERVICES PROGRAM) MEETINGS

Number of students	17	11
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COMMUNITY AND SCHOOL EDUCATIONAL PROGRAMS

Bloodborne Pathogens Number of participants: 12	Babysitting Class Number of sessions: 2 Number of participants: 36 parents
Growing Up & Liking It Number of sessions: 1 Number of participants: 70	Beach Testing & Monitoring Issues Number of sessions: 2 Number of participants: 10 + Open House at Bay Pharmacy
Preparing Children for Kindergarten Number of sessions: 1 Number of participants: 105	Picky Eaters Workshop Number of sessions: 1 Number of participants: 18
What is Public Health? Number of sessions: 2 Number of participants: 4	Kids Health Fair Number of sessions: 1 Number of participants: 18
Diabetes Number of sessions: 1 Number of participants: 50	Blood Pressure Education Number of sessions: 1 Number of participants: 7
Hand Washing Education Number of sessions: 1 Number of participants: 18	Epi Pen Use In-service Number of sessions: 1 Number of participants: 7

**Persons 18 and Over
Screened at Blood Pressure Clinics**

Clinic Site	2002	2003	2004	2005
Sturgeon Bay	621	637	457	468
Sis. Bay/Liberty Grove	18	22	14	17
Baileys Harbor	49	30	15	13
Washington Island	113	85	105	108
Forestville	28	21	17	13
Industry	38	44	-0-	-0-
School Faculties	<u>38</u>	<u>25</u>	<u>-0-</u>	<u>-0-</u>
	905	864	608	619

Foot Care Clinics

Forestville	66	64	56	53
Sturgeon Bay	12	-0-	-0-	-0-

**Door County Public Health Department
Collaboration with Community Agencies
2005**

- American Cancer Society
- American Lung Association of Wisconsin
- Annual Bridge Walk Committee
- Bioterrorism Consortium of Lake Michigan
- Bloodborne Pathogens Policy Review Committee
- Child Health Team
- Children's Services Network
- Community Clinic of Door County, Inc.
- Door County Integrated Services Project
- Door County Memorial Hospital Home Health
- Door County Teen Parent Program
- Elderly Abuse Interdisciplinary Team (E-Team)
- End of Life Coalition
- Headstart
- Healthy Families
- Hispanic Resource Center
- Housing Authority
- Infection Control Committee at DCMH
- Local Emergency Planning Committee
- Long-term support Planning Committee
- March of Dimes
- Our Nest Monthly Meetings
- Preschool Interagency Planning Council
- Senior Connection
- Social Services Administrative Review Board
- Tobacco-Free Coalition
- United Way Allocations Committee
- W-2 Program
- Wellness Center of Door County
- Wisconsin Maternal Mortality Review Committee
- Wisconsin Well Woman Program Advisory Committee

Summary Sections, Door County Beach Report 2005

G.T. Kleinheinz and C.M. McDermott

14 December, 2005

General

Overall, the number of beach advisories and closures in 2005 (2.54% of beach days) was similar to that found in 2004 (3.21% of beach days). There did not appear to be any problems with excessive contamination events. This is interesting since there was very little precipitation for much of the summer. June, the driest month of the summer, however, had more advisories and closures than either July or August.

There is now a nice baseline of data to support future monitoring results. That is, should abnormally higher levels of *E. coli* be found in the future during routine monitoring it likely could be associated with a unique contamination event. There are differences from beach to beach that have become constant from year to year, so we have a better understanding of the 'background' levels at each beach. Again, Sunset Beach in Sturgeon Bay had the most advisories and closures, but in 2005 Otumba Park Beach in Sturgeon Bay had fewer problems than in 2004. The attached summary table is self-explanatory.

Spatial Data

As with the last few years, spatial sampling at the various beach location shows that the highest levels of *E. coli* are found at the shallower depths (12" vs. 24" and 48"). There is no clear difference between *E. coli* concentrations found at the left, center and right of the beach at any location with the possible exception of Nicolet and Bailey's Harbor. Statistics will be performed to compare means at these locations. The data from 2005 supports data collected from 2004 and earlier.

Inland Lakes

Inland lakes showed very low levels of *E. coli* during 2005 and there does not appear to be a significant issue with *E. coli* at these locations. The data from 2005 supports data collected from 2004 and earlier. There is now a nice baseline of data to support future monitoring results. That is, should higher levels of *E. coli* be found in the future it is likely associated with a unique event.

Avian Waste Survey

There is clearly no relationship between avian waste (goose or gull) on the beach and the *E. coli* in the water at the locations studied. These data are clear for the same day *E. coli* and the following day *E. coli* determinations. All supporting material is in the paper that will be published in the *Journal of Great Lakes Research* 2006 (Vinni is co-author). In fact, the data suggest that counting birds may be a better indicator of *E. coli* concentrations in water than are avian waste surveys. Two years of data show the same pattern.

Sand

Overall, concentrations of *E. coli* in sand were relatively low when compared to data from lower Lake Michigan and other more southern beaches. Some beaches, such as Otumba and Bailey's Harbor, did have relatively high levels of *E. coli* in the swash zone sand and may be a concern at times for young children playing in that area of the beach. There did not appear to be any increase in *E. coli* concentrations in sand over the course of the summer ("build up" effect), but the summer was very dry and this may have negatively impacted the survival and/or replication of *E. coli* in sand. Enterococci to *E. coli* ratios in sand were similar at the various locations tested. These data are preliminary, however, and we only have one year of data (2005).

Rainfall

Overall, the rainfall data is spotty. This is the result of two issues that arose during 2005. First, there was a lack of rain for much of the swimming season, making data collection difficult to impossible. In addition, there were several technical issues that arose affecting the amount and quality of the data. Thus, in most cases there is not enough data to support any concrete conclusions about the effect of rain on a particular beach. Having said that, there was still some useful data collected and it is summarized by the below bullets.

- Whitefish Dunes has little problems with rainfall effects.
- Bailey's Harbor only showed elevated levels during one rain event and had one event with one high level.
- Lakeside had two rain events that suggested there was a lag of 3-12 hours to peak *E. coli* levels. Three of four rain events caused "closure levels" of *E. coli*.
- Ephraim had elevated levels of *E. coli* after rain, but only one of two rain events caused a "closure level" of *E. coli* to occur.
- All three rain events at Murphy Park caused "closure levels" of *E. coli*, but at different time intervals.
- Two of three rain events at Egg Harbor showed elevated *E. coli* levels and one of these two would have resulted in a closure.
- Fish Creek only had one rain event, but this showed very high levels of *E. coli* with a peak at 2 hours after event and declining to 24 hours post event.
- Otumba again (as in 2004) showed an elevated *E. coli* level after the rain event, although the time was a bit different.
- Anclam showed very high levels of *E. coli* after rain, although timing is very different. There was a nice building effect for a couple of events and two of the three events showed very high levels after 24 hours post event.
- Special sampling in Ephraim showed elevations of bacterial concentrations at the various sites sampled. However, the levels were not as high as may be expected.
- Special sampling at the sites in Sturgeon Bay showed VERY high levels in the storm drains (>14,000/100mLs in one case).

Cladophora

The *Cladophora* mats clearly show elevated levels of *E. coli* in the preliminary work that was completed during 2005. However, this data is incomplete at this time and more statistics will be completed in the future. The mats clearly show high levels and there appear to be higher levels closer to the mat. Thus, people should avoid swimming in and near these mats, if at all possible. We recognize the importance of this issue and plan to conduct additional work during 2005. We have had a three-year NOAA Sea Grant funded (over \$300,000) that will address this issue in depth during 2007-2009. We would like to find some resources to start the study in 2005 and collect as much information before Sea Grant Funding arrives.

Pathogens

For two years, we have evaluated selected beaches in Door County for three important waterborne pathogens, *Salmonella*, *Shigella*, and *Campylobacter*. All three organisms are found in fecal material and have been attributed to outbreaks of gastrointestinal illness from exposure through water. In both 2004 and 2005, *Salmonella* and *Shigella* could not be detected in any water sample collected at any beach at any time. *Campylobacter*, however, has been found in both years. In 2004, *Campylobacter jejuni* was found only at Otumba Park Beach. Several isolates of this organism from 2004 were saved frozen for further characterization. In 2005, detection of *Campylobacter jejuni* was more widespread. The organism was found in water at Ellison Bay, Murphy Park, Nicolet Bay, Otumba Park, and Sunset Park. Concentrations ranged from a small

number (insignificant) of organisms/L to more than could be counted by the standard techniques utilized. Whenever possible, isolates of *Campylobacter jejuni* from beach water, as well as from avian waste, were saved frozen for further characterization. We were unable to detect *Campylobacter jejuni* in human waste.

Serotyping (determining small strain differences within the species) of *Campylobacter jejuni* has been conducted by some researchers investigating disease outbreaks in human populations. Sixty-two different serotypes have been identified, based on surface differences between organisms in the species. We utilized these same techniques to further characterize our frozen isolates from 2004 and 2005. Unfortunately, *Campylobacter* is a fastidious organism and is difficult to grow in lab culture. Not all of our frozen isolates were "revived", but we are continuing to try different techniques to bring them back up from the freezer. Organisms from avian waste have not been successfully regrown after freezing. Of those organisms that we were able to revive, we have found that approximately 50% are untypable (i.e. do not fall into any of the 62 known serotypes). Other researchers have found that approximately 10% of isolates from outbreaks of human disease are untypable. In most cases of identification of bacteria found in the environment, fewer isolates can be typed because the methods have originally been designed for organisms from disease outbreaks, as we see with our *Campylobacter* isolates. We will attempt to retype these "untypable" organisms in January.

Of the organisms that were typed, we have found a range of serotypes. A review of the literature finds that many different serotypes have been detected during outbreaks of gastrointestinal disease in humans, but that a few serotypes are most frequent. These include serotype 2, 4, and 17, while serotypes 1, 5, and 31 are most common in poultry waste and serotypes 2 and 4 are common in cattle feces. When comparing our isolates to those identified in outbreaks of human disease or from livestock, we find that our isolates are not of similar serotypes. If we can "revive" our *Campylobacter* isolates obtained from avian waste (goose and gull), we would be better able to compare water isolates with those found in feces of local avian species.

Door County Beach Season 2005

Adv=Advisories

Clos=Closures

Beach	June Adv	June Clos	July Adv	July Clos	August Adv	August Clos	Total Adv	Total Clos
Anclam	0	0	1	0	0	0	1	0
Bailey's Harbor	1	0	0	0	0	0	1	0
Egg Harbor	1	0	1	1	0	0	2	1
Ellison Bay	3	0	0	0	0	0	3	0
Ephraim	1	1	0	0	1	0	2	1
Europe1	0	0	0	0	0	0	0	0
Europe2	0	0	0	0	0	0	0	0
Europe3	0	0	0	0	0	0	0	0
Fish Creek	1	2	1	1	1	0	3	3
Gislason	0	0	0	0	0	0	0	0
Haines	0	0	0	0	0	0	0	0
Jackson Harbor	0	0	1	0	0	0	1	0
Lakeside	1	0	0	1	0	0	1	1
Murphy	0	1	2	0	2	1	4	2
Newport	0	0	0	0	0	0	0	0
Nicolet Bay	3	0	1	1	1	0	5	1
Otumba	2	1	1	1	0	(3)	3	2(3)
Percy Johnson	0	0	0	0	0	0	0	0
Portage	2	1	1	1	0	0	3	2
Rock Island	0	0	0	0	0	0	0	0
Sand Dune	0	0	0	0	0	0	0	0
Sandy Bay	0	0	0	0	0	0	0	0
Schoolhouse	0	0	0	0	0	0	0	0
Sister Bay	2	0	1	0	0	0	3	0
SB Rec Canal	0	2	1	0	0	0	1	2
Sunset	4	1	4	1	1	2/(2)	9	4(2)
Whitefish Bay	0	0	0	0	0	0	0	0
Whitefish Dunes	1	1	0	2	0	0	1	3
Total	22	10	15	9	6	3/(5)	43	22 (5)

() = Pre-emptive closure due to rainfall

93 Beach days

2005 Advisories= 1.7% of beach days

2005 Closures= 0.84% of beach days

2004 Advisories- 2.6% of beach days

2004 Closures= 0.61% of beach days

Child Alert Program 2005

The Child Alert Program is a program designed for children living in a community who have special health care needs that may require emergency services more frequently, and/or have unique needs during an emergency. If local emergency medical personnel know of these children and the nature of their condition ahead of time, they are able to respond more efficiently and effectively to an emergency call.

The goal of the program is to improve the health outcomes for special needs children during emergencies by the following:

- strengthening the preparation and effectiveness of local Emergency Medical Services (EMS) by providing knowledge and training on special needs specific to children within the community before an emergency; and
- providing a system for families to communicate with and advocate for their children within the emergency response system in their community.

Children ages birth to 21 years with a long term, chronic illness, or condition that is severe enough to restrict growth, development, or ability to engage in usual activities can qualify for the program. A child may qualify if he/she has a condition that is likely to be present or persist for 12 months to lifelong. The condition needs to be complex enough to require specialized health care, psychological, or educational services of a type or amount beyond that required generally by children. Lastly, the child requires the use of technology for survival. Currently, Door County has 20 children enrolled in the program.

The Child Alert Facilitator is responsible for assessing each of the children on the program and completing the appropriate forms. The medical information is then shared with the child's health care provider, the dispatch center, Emergency Services, and the hospital emergency department. Medical information is kept confidential by all participating staff and is protected under Wisconsin Statute 146.82.

The Facilitator is also responsible for:

- serving as the primary contact for the county;
- promoting, developing, and supporting the Child Alert Program for the county;
- identifying Child Alert Advocates;
- updating the emergency information form every 6-12 months or as needed;
- identifying educational and equipment needs for EMS;
- referring information to another county's Child Alert Facilitator if a child moves to a different area of the state; and
- completing an annual survey.

Emergency Preparedness and Bioterrorism

The Door County Public Health Department continues to be an active participant in the activities of the Bioterrorism Consortium of Lake Michigan (BCOLM).

- Public health nurse attends the monthly meetings.
- Door County Health Department staff attended the Regional Mass Clinic Exercise in Green Bay.
- The Regional Pandemic Influenza Plan was tested through a tabletop exercise among regional health departments, hospitals, and emergency management.
- Command Caller Notification was developed and tested to enhance communication between BCOLM members.
- Local data of communicable disease, sexually transmitted diseases, and animal exposure is collected weekly and submitted to the BCOLM epidemiologist for assessment and surveillance purposes.
- Local data regarding communicable disease and sexually transmitted disease was collected and submitted to the BCOLM epidemiologist monthly, as well as from the past 5 years. This data was used to determine the top 10 reported diseases in Door County.

The Door County Public Health Department continues to prepare for potential local public health emergencies, as well as bioterrorism related disasters.

- The Door County Public Health Emergency Plan was upgraded in 2005.
- Our local Public Health Emergency Planning Coordinator was trained to equip and fit test health department staff members with appropriate personal protective equipment.
- Our Public Health Emergency Planning Coordinator provided Emergency Preparedness Awareness to Door County residents.
- Public Health staff attended a Red Cross Shelter Training and then utilized the knowledge during Labor Day Weekend, as a result of Hurricane Katrina.
- Public Health staff received an in-service from BCOLM Health Educator regarding HAN (Health Alert Network) and TRAIN (a distance Learning Management System).
- A public health nurse was on the Planning Team for a full-scale disaster exercise in northern Door County. Additional staff members participated in the drill.

Family Planning/Reproductive Health Grant 2005

The 2005 family planning/reproductive health grant was subcontracted to provide services at the Wellness Center of Door County.

The first component of this grant program was to provide early identification of pregnancy services to Door County women. **Sixty-two unduplicated women** received early identification of pregnancy services through clinics sponsored by Door County Health Department via a subcontract with the Wellness Center of Door County.

The second component of the grant was to provide comprehensive family planning/reproductive health services to Door County women. There were **210 unduplicated women** who received family planning services through clinics sponsored by the Door County Public Health Department via a subcontract with the Wellness Center of Door County.

Community Sharps Collection Program

Currently, the Door County Public Health Department maintains a sharps collection program, which includes eleven (11) collection stations in the county. This program was designed and intended for individuals who use sharps in their homes. In 2005, 1,289 pounds of this infectious waste was collected and disposed of properly through this program.

This program offers a very valuable service for Door County residents and visitors who need to dispose of household sharps, such as insulin syringes, needles, and lancets. Not only does this program benefit the users, but it also benefits all of Door County by providing a safe place to dispose of sharps. Sharps (needles, syringes, and lancets) that are not properly handled or are improperly discarded can pose a serious risk of infection and disease to family members and others; especially children, sanitation workers, and others who might accidentally be stuck by them.

Community members use the sharps collection stations in the county very frequently. Individuals, who previously did not know what to do with their used sharps, now have a place to dispose of them.

Tobacco Control Grant Year 2005 Annual Report

The funding for the Tobacco Control grant is used to focus on goals that are congruent with the Department of Health and Family Services at the state. The 2004 Door County Community Health Assessment identified tobacco use as the second highest health priority for Door County. Over \$15 million is spent in lost productivity and health related costs related to tobacco each year in Door County. Statewide teen smoking has decreased to 23%.

In 2005, we concentrated on one objective through the state, which focused on youth implementing tobacco prevention strategies in collaboration with the Wisconsin Wins contract agency. However, we implemented several other strategies to reach the community. These included:

- Provision of earned media through articles written in the Door County Advocate.
- Implementation of *Freedom from Smoking* classes for community members.
- Delivery of education at health fairs regarding tobacco and the dangers of usage.
- Recruitment and training of youth to work with the Wisconsin Wins Program.
- Involvement of youth while working in conjunction with the Wisconsin Wins Program.
- Youth related initiatives include radio interviews, youth written public service announcements aired on a local radio station and other public service announcements aired on three different radio stations.
- Communication with law enforcement agencies.
- Provision of earned media through radio interviews and articles on local news website.

Wisconsin Well Woman Program (WWWP) Year 2005 Annual Report

WWWP has now completed its 12th year. The program has increased the number of women served since its inception. The WWWP serves women aged 35-64 who are uninsured or underinsured and who meet the income guidelines of $\leq 250\%$ of the poverty level. The program screens women for breast and cervical cancer, cardiovascular disease, osteoporosis, diabetes, hypertension, domestic violence, mental health issues and Multiple Sclerosis.

In 2005, 99 women were screened in this program. The majority of these women were over age 50, which is in compliance with the Centers for Disease Control's (CDC) guidelines. There are currently eight women enrolled in Wisconsin Well Woman Medicaid.

The WWWP Advisory Committee works on fundraising projects throughout the year. The 11th Annual Bridge Walk was held in September. We raised over \$6,000 for women in Door County to utilize for expenses related to breast and cervical cancer.

The responsibilities of the grant coordinator are as follows:

- Maintain a tracking system of all women served through this grant,
- Send reminders to each woman who needs to be re-screened,
- Communicate with providers, billing and clinic staff via in-services and phone calls,
- Complete Local Activity Reports as needed for the State of Wisconsin,
- Provide case management including proper referral and follow up,
- Attend health fairs, home shows, and many speaking engagements,
- Coordinate the Bridge Walk and other fundraisers,
- Create and distribute flyers for provider's offices, churches, businesses, etc.,
- Provide community education and outreach,
- Meet with the Bridge Walk Committee monthly beginning May through October,
- Attend WWWP Conventions and Coordinators Meetings,
- Participate in WWWP conference calls,
- Obtain and maintain signed contract with the providers,
- Enroll eligible women into Wisconsin Well Woman Medicaid (WWWP MA), and
- Track the women in WWWP MA and re-enroll them into the program.